



PTO/SB/08a (05-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form PTO/A49A

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

Application Number	10/005,789
Filing Date	November 8, 2001
First Named Inventor	Hartlaub
Art Unit	3763
Examiner Name	Kathryn L. Thompson
Attorney Docket Number	011738.00038

RECEIVED

NOV 03 2003

U.S. PATENT DOCUMENTS

TECHNOLOGY CENTER R3700

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
KLP		US-2003/0007991 A1	01-09-2003	Masters	
		US- 4,140,122	02-20-1979	Kühl et al.	
		US- 4,952,406	08-28-1990	Brown et al.	
		US- 5,011,472	04-30-1991	Aebischer et al.	
		US- 5,366,454	11-22-1994	Currie et al.	
		US- 5,584,885	12-17-1996	Seckel et al.	
		US- 5,632,983	05-27-1997	Hadden	
		US- 5,643,207	07-01-1997	Rise	
		US- 5,711,316	01-27-1998	Elsberry et al.	
		US- 5,731,181	03-24-1998	Kmiec et al.	
		US- 5,735,814	04-07-1998	Elsberry	
		US- 5,736,129	04-07-1998	Medencia et al.	
		US- 5,769,823	06-23-1998	Otto	
		US- 5,795,972	08-18-1998	Kmiec	
		US- 5,814,014	09-29-1998	Elsberry et al.	
		US- 5,832,932	11-10-1998	Elsberry et al.	
		US- 5,980,885	11-09-1999	Weiss et al.	
		US- 6,004,804	12-21-1999	Kumar et al.	
		US- 6,010,907	01-04-2000	Kmiec et al.	
		US- 6,042,579	03-28-2000	Elsberry	
		US- 6,093,180	07-25-2000	Elsberry	
✓		US- 6,151,525	11-21-2000	Soykan et al.	
		US- 6,206,914	03-27-2001	Soykan et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
KLP		WO 97/40874	11-06-1997	Elsberry et al.		
		WO 98/02040	01-22-1998	Stokes et al.		
		WO 98/02150	01-22-1998	Stokes et al.		
		WO 98/15615	04-16-1998	Haynes et al.		
		WO 98/48723	11-05-1998	Elsberry et al.		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
KLP		Metzler, M., Helgason, C., Dragatsis, I., Zhang, T., Gan, L., Pineult, N., Zeitlin, S., Humphries, R., and Hayden, M., "Huntington is required for normal hematopoiesis," Hum. Mol. Genet. 9: 387-94 (2000)	

		Kren, B., Cole-Strauss, A., Kmiec, E., and Steer, C., "Targeted nucleotide exchange in the alkaline phosphatase gene of HuH-7 cells mediated by a chimeric RNA/DNA oligonucleotide," Hepatology 25: 1462-8 (1997)	
		Kren, B., Bandyopadhyay, P., and Steer, C., "In vivo site-directed mutagenesis of the factor IX gene by chimeric RNA/DNA oligonucleotides," Nature Medicine 4: 285-90 (1998)	
		Kren, B., Parashar, B., Bandyopadhyay, P., Chowdhury, N., Chowdhury, J., and Steer, C., "Correction of the UDP-glucuronosyltransferase gene defect in the Gunn rat model of Crigler-Najjar syndrome type I with a chimeric oligonucleotide," Proc. Natl. Acad. Sci. USA 96: 10349-54 (1999)	
		Bandyopadhyay, P., Ma, X., Linehan-Stieers, C., Kren, B., and Steer, C., "Nucleotide exchange in genomic DNA of rat hepatocytes using RNA/DNA oligonucleotides- Targeted delivery of liposomes and polyethylenimine to the asialoglycoprotein receptor," J. Biol. Chem. 274: 10163-72 (1999)	
		Havre, P. and Kmiec, E. (1998) RecA-mediated joint molecule formation between O-methylated RNA/DNA hairpins and single-stranded targets. Mol Gen Genet 258 (6): 580-586	
		Gamper, H.J., Cole-Strauss, A., Metz, R., Parekh, H., Kumar, R. and Kmiec, E. (2000) A plausible mechanism for gene correction by chimeric oligonucleotides. Biochemistry 39 (19): 5808-5816	
		Cole-Strauss, A., Gamper, H., Holloman, W., Munoz, M., Cheng, N. and Kmiec, E. (1999) Targeted gene repair directed by the chimeric RNA/DNA oligonucleotide in a mammalian cell-free extract. Nucleic Acids Research 27 (5): 1323-1330	
		Klement, I., Skinner, P., Kaytor, M., Yi, H., Hersch, S., Clark, H., Zoghbi, H. and Orr, H. (1998) Ataxin-1 Nuclear Localization and Aggregation: Role in Polyglutamine-Induced Disease in SCA1 Transgenic Mice, Cell, Vol. 95, pg. 41-53, 10/2/98.	
		Ellerby, L., Andrusiak, R., Wellington, C., Hackam, A., Propp, S., Wood, J., Sharp, A., Margolis, R., Ross, C., Salvesen, G., Hayden, M. and Bredesen, D. (1999) Cleavage of atrophin-1 at caspase site aspartic acid 109 modulates cytotoxicity. J Biol Chem 274 (13): 8730-8736	
		Faber, P., Alter, J., MacDonald, M. and Hart, A. (1999) Polyglutamine-mediated dysfunction and apoptotic death of a caenorhabditis elegans sensory neuron. Proc Natl Acad Sci USA 96 (1): 179-184	
		Prospects of Chimeric RNA-DNA Oligonucleotides in Gene Therapy, Xue-Song Wu, De-Pei Liu Chih-Chuan Liang, National Laboratory of Medical Molecular Biology, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, PRC; Journal of Biomedical Science, 2001 8:439-445.	
		Targeted Gene Repair and Its Application to Neurodegenerative Disorders, Hetal Parekh-Olmedo, et al., Department of Biological Sciences Delaware Biotechnology Institute University of Delaware Newark, Department of Neurology Massachusetts General Hospital Harvard Medical School Boston MA, Neuron, Vol. 33, 495-498, February 14, 2002.	
		Recombinant Proteins for Neurodegenerative Diseases: The Delivery Issue, Patrick Aebischer et al., Trends in Neurosciences Vol. 24, No. 9 September 2001.	
		Whittemore et al., Gene Therapy and the Use of Stem Cells for Central Nervous System Regeneration, Advances in Neurology Vol 72, pp. 113-119 (1997).	
		Will, et al. "Regeneration in Brain and Spinal Cord", Cellular and Molecular Basis of Regeneration From Invertebrates to Humans", pp. 379-397, Wiley & Sons (1998).	
		Stitchel-Gunkel, "The Role of the Microenvironment in Axonal Regeneration," Advances in Anatomy, Embryology and Cell Biology 137 (1997).	
		Gorio, Neuroregeneration, deVellis, "Supporting Cells Central and Peripheral", Chapter 4, pp. 61-62 (1992)	
		Berry and Logan, CNS INJURIES: Cellular Responses and Pharmacological Strategies, Chapter 9, pp. 169-189 (1998).	
		Seil, M.D., "Neuronal Regeneration, Reorganization, and Repair," Advances in Neurology, Vol. 72, pp. 121-123 (1997).	

Examiner Signature	<i>Kathleen M. [Signature]</i>	Date Considered	02/24/04
--------------------	--------------------------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.